

STATE CORPORATION COMMISSION OF KANSAS
OIL & GAS CONSERVATION DIVISION
WELL COMPLETION FORM
ACO-1 WELL HISTORY
DESCRIPTION OF WELL AND LEASE

API NO. 15- 179-21,032

County Sheridan

Approx.

SE - NW - NE - Sec. 23 Twp. 9S Rge. 26

MAY 29 1993

Operator: License # 9482Name: National Petro. Reserves, Inc.Address 250 N. Rock Rd., Ste. #340City/State/Zip Wichita, KS 67206

Purchaser:

Operator Contact Person: Ted C. BredehoftPhone (316) - 681-3515Contractor: Name: Emphasis Oil OperationsLicense: 8241Wellsite Geologist: Craig Chaulk

Designate Type of Completion

☒ New Well ☐ Re-Entry ☐ Workover

☒ Oil ☐ SWD ☐ SOW ☐ Temp. Abd.
☐ Gas ☐ ENHR ☐ SIGW
☐ Dry ☐ Other (Core, WSW, Exp., etc.)

If Workover/Re-Entry: old well info as follows:

Operator:

Well Name:

Comp. Date Old Total Depth

☐ Deepening ☐ Re-perf. ☐ Conv. to Inj/SWD
☐ Plug Back ☐ PBD
☐ Commingled ☐ Docket No.
☐ Dual Completion ☐ Docket No.
☐ Other (SWD or Inj?) ☐ Docket No.

3/15/92

Spud Date

3/24/92

Date Reached TD

4/10/92

Completion Date

1040 Feet from S/W (circle one) Line of Section

1530 Feet from E/W (circle one) Line of Section

Footages Calculated from Nearest Outside Section Corner:
NE, SE, NW or SW (circle one)Lease Name Pfeifer Well # 4Field Name EplerProducing Formation Lansing- K.C. 200' (K) zoneElevation: Ground 2650' KB 2655'Total Depth 4170' PBD Amount of Surface Pipe Set and Cemented at 266 FeetMultiple Stage Cementing Collar Used? ☒ Yes ☐ NoIf yes, show depth set 2320 FeetIf Alternate II completion, cement circulated from 2320feet depth to surface w/ 310 sx cm

Drilling Fluid Management Plan
 (Data must be collected from the Reserve Pit)

6-4-92

Chloride content 3000 ppm Fluid volume 160 bblDewatering method used Dehydration/Evaporation

Location of fluid disposal if hauled offsite:

Operator Name Lease Name License No. Quarter Sec. Twp. S Rng. E/WCounty Docket No.

INSTRUCTIONS: An original and two copies of this form shall be filed with the Kansas Corporation Commission, 200 Colorado Derby Building, Wichita, Kansas 67202, within 120 days of the spud date, recompletion, workover or conversion of a well. Rule 82-3-130, 82-3-106 and 82-3-107 apply. Information on side two of this form will be held confidential for a period of 12 months if requested in writing and submitted with the form (see rule 82-3-107 for confidentiality in excess of 12 months). One copy of all wireline logs and geologist well report shall be attached with this form. ALL CEMENTING TICKETS MUST BE ATTACHED. Submit CP-4 form with all plugged wells. Submit CP-111 form with all temporarily abandoned wells.

All requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Signature *[Signature]*Title PresidentDate 4-24-91

Subscribed and sworn to before me this 24 day of April,
 19 92.

Notary Public *[Signature]*Date Commission Expires 5-13-93

SUSAN E. BREDEHOFT
 NOTARY PUBLIC
 STATE OF KANSAS
 My Appt. Exp. 5-13-93

K.C.C. OFFICE USE ONLY

F ☒ Letter of Confidentiality Attached
 C ☒ Wireline Log Received
 C ☐ Geologist Report Received

Distribution

☒ KCC
☒ KGS

☐ SWD/Rep ☒ NGPA
☐ Plug ☒ Other
 (Specify)

JUN 1 1992

Form ACO-1 (7-91)

CONSERVATION DIVISION
 Wichita, Kansas

WSS-9-ES SIDE TWO 68941
 Operator Name National Petro. Reserves, Inc. Lease Name Pfeifer Well # 4
☐ East County Sheridan
 Sec. 23 Twp. 9S Rge. 26 ☒ West

INSTRUCTIONS: Show important tops and base of formations penetrated. Detail all cores. Report all drill stem tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface during test. Attach extra sheet if more space is needed. Attach copy of log.

Drill Stem Tests Taken (Attach Additional Sheets.)	☒ Yes ☐ No	☒ Log	Formation (Top), Depth and Datums	☐ Sample
Samples Sent to Geological Survey	☐ Yes ☒ No	Name	Top	Datum
Cores Taken	☐ Yes ☒ No	Anhydrite	2306	+351
Electric Log Run (Submit Copy.)	☒ Yes ☐ No	B/Anhydrite	2345	+312
List All E.Logs Run:		Topeka	3657	-1000
		Heebner	3866	-1209
		Toronto	3890	-1233
		Lansing	3908	-1251
		Base/K.C.	4138	-1481

CASING RECORD

☒ New ☐ Used

Report all strings set-conductor, surface, intermediate, production, etc.

Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs./Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
Surface	12 1/4"	8 5/8"	20#	260'	60/40 poz	170	3%gel 2%cc
Production	7 7/8"	5 1/2"	12.5#	4176'	60/40 poz	318 top 75 btm	3%gel 2%cc

ADDITIONAL CEMENTING/SQUEEZE RECORD

Purpose:	Depth Top Bottom	Type of Cement	#Sacks Used	Type and Percent Additives
☐ Perforate				
☐ Protect Casing				
☐ Plug Back TD				
☐ Plug Off Zone				

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used)	Depth
3	4100.5-4106.5	2000 gal 15% NE Acid	4106.5
3	3945.5-3947.5	1000 gal 15% PAD Acid	3947.5

TUBING RECORD	Size	Set At	Packer At	Liner Run	☐ Yes ☒ No
	2 3/8"	4117			
Date of First, Resumed Production, SWD or Inj.	4/10/92	Producing Method	☐ Flowing ☒ Pumping ☐ Gas Lift ☐ Other (Explain)		
Estimated Production Per 24 Hours	Oil 40 Bbls.	Gas tstm Mcf	Water 3.37 Bbls.	Gas-Oil Ratio	Gravity 37

Disposition of Gas:

METHOD OF COMPLETION

Production Interv

☐ Vented ☐ Sold ☒ Used on Lease
(If vented, submit ACO-18.)

☐ Open Hole ☒ Perf. ☐ Dually Comp. ☐ Commingled
☐ Other (Specify) _____

4100-4106

ORIGINAL

RELEASED

KCC

EMPHASIS OIL OPERATIONS

JUN 1 8 1993

P. O. BOX 506

RUSSELL, KS 67665

FROM CONFIDENTIAL

MAY 29 1993
CONFIDENTIAL

DRILLERS LOG

OPERATOR: National Petroleum Reserves, Inc.
250 N. Rock Rd., Ste. #340
Wichita, KS 67206

CONTRACTOR: Emphasis Oil Operations
Box 506
Russell, KS 67665

LEASE: Pfeifer

WELL #4

LOCATION: Approx. SE NW NE
Section 23-9S-26W
Sheridan County, Kansas

LOGGERS TOTAL DEPTH: 4169'

ROTARY TOTAL DEPTH: 4170'

COMMENCED: 3/15/92

ELEVATION: 2655' K.B.

COMPLETED: 3/24/92

CASING: 8-5/8" @ 266' w/170 sks cement
5-1/2" @ 4168' w/300 sks cement (Top Stage)
w/75 sks cement (Bottom Stage)

STATUS: Oil Well

DEPTHS & FORMATIONS

(All measurements from K.B.)

Dakota Sand	640'	Topeka	3658'
Shale	756'	Heebner	3869'
Cedar Hills	1876'	Toronto	3890'
Shale	2085'	Lansing-Kansas City	3907'
Anhydrite	2306'	R.T.D.	4170'
Shale	2348'		

STATE OF KANSAS)
) ss
COUNTY OF RUSSELL)

K. Scott Branum, of Emphasis Oil Operations, states that the above and foregoing is a true and correct log of the above captioned well, to the best of his knowledge.



COPY

KCC

RELEASED

MAY 29 1993

JUN 8 1993

CONFIDENTIAL

FROM CONFIDENTIAL

- 3/20/92 DST #1 (3876-3918); Toronto and "A" zones: 30-30-45-45; 1st open-weak blow built to 6"; 2nd open-weak blow built to 5"; recovery: 90 ft muddy water, 120 ft slightly muddy water, 120 ft water, slight trace oil thru-out; IFP 79-123; FFP 152-239; ISIP-1065; FSIP-1000; BHT 121°; drilling at 3,918 ft.
- 3/20/92 DST #2 (3939-3960); Lansing 50 ft zone; 30-30-45-45; 1st open-weak blow built to bottom bucket 27 minutes; 2nd open-built to bottom bucket 16 minutes; recovery: 300 ft gas-in-pipe, 55 ft. clean oil, 50 ft muddy oil, 10 ft water; IFP 29-36; FFP 43-58; ISIP-340; FSIP-376; BHT 115°; drilling at 3,960 ft.
- 3/21/92 DST #3 (3961-3988); base 50 ft & 90 ft zones; 15-15-15-15; 1st open-weak blow died 7 minutes; 2nd open-no blow, built to weak surface blow thru-out; recovery: 25 ft mud with oil spots; IFP 36-36; FFP 43-43; ISIP-1065; FSIP-1007; BHT 122°; drilling at 3,988 ft.
- DST #4 (4016-4050); 140 ft zone, Lansing; 30-30-60-60; 1st open-good blow built to bottom bucket in 7 minutes; 2nd open-good blow built bottom bucket 22 minutes; recovery: 300 ft gas-in-pipe, 210 ft oil cut muddy water, 300 ft slightly oil cut water; IFP 65-152; FFP 210-282; ISIP-384; FSIP-326; drilling at 4,050 ft.
- 3/22/92 DST #5 (4051-4073); Lansing 160 ft zone; 15-15-15-15; 1st open-weak surface blow thru-out; 2nd open-no blow; recovery: 2 ft mud with show dead oil; IFP 36-36; FFP 36-36; ISIP-43; FSIP-36; BHT 124°; drilling at 4,073 ft.
- DST #6 (4051-4090); Lansing 180 ft zone; 30-30-30-30; 1st open-weak steady ½" blow; 2nd open-weak steady ½" blow; recovery: 5 ft mud with spots of oil, good show oil in tool; IFP 50-43; FFP 43-43; ISIP-58; FSIP-50; drilling at 4,090 ft.
- 3/23/92 DST #7 (4086-4117); Lansing 200 ft zone; 30-30-60-60; 1st open-fair blow built to bottom bucket in 12 minutes; 2nd open-fair blow built to bottom bucket in 20 minutes; recovery: 725 ft gas-in-pipe; 120 ft clean gassy oil, 55 ft oil cut mud; IFP 50-58; FFP 65-79; ISIP-311; FSIP 152; BHT 125°; drilling at 4,117 ft.

RECEIVED
STATE CORPORATION COMMISSION

JUN 1 1992

CONSERVATION DIVISION
Wichita, Kansas